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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/717,571	11/21/2003	Koji Shigemura	1670.1020	9396

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EXAMINER

CLEVELAND, MICHAEL B

ART UNIT	PAPER NUMBER
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1762

DATE MAILED: 01/11/2006

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary

Application No.

10/717,571

Applicant(s)

SHIGEMURA, KOJI

Examiner

Michael Cleveland

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1762

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 10 November 2005.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-19 is/are pending in the application.
- 4a) Of the above claim(s) 1-13 is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 14-19 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 11/21/2003 is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☒ All b) ☐ Some * c) ☐ None of:
1. ☒ Certified copies of the priority documents have been received.
 2. ☐ Certified copies of the priority documents have been received in Application No. _____.
 3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- | | |
|---|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413)
Paper No(s)/Mail Date. _____ |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | 5) <input type="checkbox"/> Notice of Informal Patent Application (PTO-152) |
| 3) <input checked="" type="checkbox"/> Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)
Paper No(s)/Mail Date <u>112103</u> . | 6) <input type="checkbox"/> Other: _____ |

DETAILED ACTION

Election/Restrictions

1. Applicant's election with traverse of Group III, claims 14-19 in the reply filed on 11/10/2005 is acknowledged. The traversal is on the ground(s) that Group I and Group II are not distinct. The argument is unconvincing because it is not related to the elected species. However, the Examiner acknowledges that inventions I and II are related as process of making and product made. The inventions are distinct if either or both of the following can be shown: (1) that the process as claimed can be used to make other and materially different product or (2) that the product as claimed can be made by another and materially different process (MPEP § 806.05(f)). In the instant case the product as claimed can be formed by another and materially different method such as etching a metal sheet to form the mask.

Regarding the restriction between Groups II and III, Applicant argues that the Examiner's proposed alternate use of using a mask for electrodeposition to form an LCD does not account for all the features of Group II. The argument is unconvincing because Group III does not require the use of those features. Furthermore, the features of the method of making a mask do not have (and are neither disclosed nor claimed as having) any functional relationship with the subsequent use of the mask that would prevent its use as a deposition for an LCD rather than an EL device.

Applicant argues that there would be no serious burden in examining all sets of claims. A serious burden exists in the differing issues likely to arise during the prosecution of the different applications.

Claim Rejections - 35 USC § 103

2. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

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3. Claims 14-16 are rejected under 35 U.S.C. 103(a) as being unpatentable over Yamada et al. (U.S. Patent Application Publication 2001/0019807, hereafter '807) in view of Ito et al. (U.S. Patent 5,652,067, hereafter '067).

'807 teaches a method of manufacturing an organic EL device, the method comprising:
forming a first electrode layer (61) in a predetermined pattern on an insulating substrate (10) [0060];

forming an organic film comprising at least a patterned emission layer (66) on the first electrode layer [0062-0063];

forming a second electrode layer (67) in a predetermined pattern on the organic film [0015];

wherein the organic films are deposited using a deposition mask frame assembly [0022] comprising:

a mask comprising a thin plate (95) in which a predetermined pattern of apertures (110) is formed,

a frame (125) supporting one surface of the mask so that the mask is tensed, and

a cover mask (126) supporting an opposite surface of the mask wherein the cover mask corresponds to the frame [0024; Fig. 5].

'807 does not explicitly teach sealing the second electrode layer. However, the Examiner takes Official Notice that it is extremely well known in the art of manufacturing organic EL devices to apply a sealing layer over the cathode to protect the cathode and the organic materials from harmful effects of air and moisture. See, e.g., '067, col. 19, lines 30-39. Therefore, it would have been obvious to one of ordinary skill in the art at the time the invention was made to have sealed the second electrode layer in order to have protected the cathode and organic material from harmful effects.

Claim 15: '807 teaches the mask may be nickel [0022].

Claim 16: '807 teaches the mask may be made by electroforming [0027].

4. Claims 17-19 are rejected under 35 U.S.C. 103(a) as being unpatentable over Yamada '807 in view of Ito '067 as applied to claim 14 above, and further in view of Kitazume (U.S. Patent Application Publication 2002/0025406, hereafter '406).

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Claims 17-18: '807 and '067 are discussed above, but do not explicitly teach that the mask, frame, and cover mask are joined by spot welding. However, '406 teaches that spot welding is a suitable method for joining the pieces of a shadow mask used for vapor deposition to form organic EL devices [0004], [0010]. Therefore, it would have been obvious to one of ordinary skill in the art at the time the invention was made to have used spot welding as the particular method of joining the mask pieces of '807 with a reasonable expectation of success because spot welding is recognized in the art as a suitable method for joining the pieces of a shadow mask used for vapor deposition to form organic EL devices. The selection of something based on its known suitability for its intended use has been held to support a *prima facie* case of obviousness. *Sinclair & Carroll Co. v. Interchemical Corp.*, 325 U.S. 327, 65 USPQ 297 (1945).

Claim 19: The welding pitch may be 1 mm [0035].

5. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Michael Cleveland whose telephone number is (571) 272-1418. The examiner can normally be reached on Monday-Thursday, 7-5:30.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Timothy Meeks can be reached on (571) 272-1423. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).


Michael Cleveland
Primary Examiner
Art Unit 1762

1/6/2006